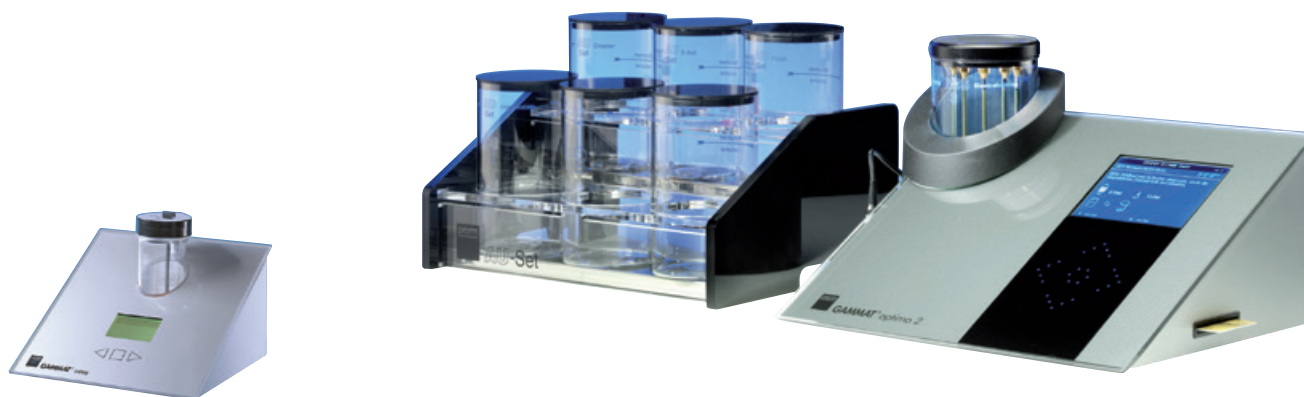


## Electroplating equipment



**In the area of electroforming, Heimerle + Meule is able to provide the proven GES Gold Electromforming System by Gramm.**

**We have been cooperating with the electroplating specialists at Gramm Technik GmbH for 20 years. Founded in 1930, Gramm was initially a supplier of industrial electroplating technology.**

**Beginning in 1990, a dental electroforming system was then developed. Since then, the partnership of the two companies has been well established and now serves customers and interested parties throughout the country with a total of 30 field staff.**

The GES system enables the production of self-supporting metal frameworks made of pure gold through an electromechanical process, which excel through exceptional biocompatibility. The low thickness of the galvanized structure (200 µm) allows more space for veneers with high aesthetic standards. The warm gold tone provides the basis for this purpose.

With little effort, an automated process of electroplating and perfectly matched materials, you can expect an exact fit every time. This is particularly evident when it comes to the production of combined restorations on zirconium, precious and non-precious alloys, as well as titanium

<b>GAMMAT®easy</b>	<b>7795 3 050</b>	<b>2,950.00 €</b>	<b>GAMMAT®optimo 2 incl. AU set</b>	<b>7795 3 072</b>	<b>5,000.00 €</b>
Fully automatic process flow			Initialization via smart card, thus enabling simple software update		Low power consumption
Automatic process shut-down			optiCLIC contacting system		For new friction for worn telescopic restorations
Short process times			Fully automatic process flow		Nickel-free 24 carat hard gold plating
Extremely easy to use			Automatic process shut-down		Automatic contact check prior to electroplating process
Menu-guided input			Short process times		Complete check of all parameters before start of process
Choice of layer thickness			Extremely easy to use		Illuminated plating head with LED placement indicator
Wide range of indications			Menu-guided input		Automatic current reduction in case of loss of contact
High output rate			Choice of layer thickness		Visualization with graphs on the colour display
Recycling process			Wide range of indications		Automatic gold quantity calculation
Automatic continuation of the process after power failure			High output rate		Revolutionary hydrodynamics for yet smoother separation even with difficult shapes
High profitability			Recycling process		
Very low power consumption			Automatic continuation of the process after power failure		
			Interface for PC, printing of process protocol		
			Compact dimensions		
			High profitability		

## Electroplating baths and accessories

The aesthetics of 24 carat gold in combination with perfect biocompatibility – that is what you will find in the Gramm gold electroplating systems. Numerous scientific studies and long-term studies confirm these outstanding properties.



A significant advantage of the GES technology lies in the reduced use of gold baths, as only the actually required gold bath is used. From an economic point of view, the system knows to impress through the complete preparation of the fine gold. The sulphide gold bath ECOLYT is non-toxic and free of arsenic. It contains 15 or 16 grams of fine gold per litre in dissolved form and is, of course, certified (CE 0483)).

### Additional advantages through the AU set

With the AU set, friction renewal of worn telescopic work is possible. The friction can thus be systematically restored through the controlled partial application of a 24 carat gold coat. Model cast frameworks can also be gold plated according to the same principle. In both cases, the gold bath ECOLYT is used.

### BEDRA DENT® gold bath for devices from other manufacturers

As an alternative for users of other electroplating devices, the gold bath BEDRA DENT® GT 15 has been included in the product range. BEDRA DENT® is a non-cyanide gold sulphite bath and knows to convince through its hardness, which provides additional stability for the metal framework.



Technical data	GAMMAT®easy	GAMMAT®optimo 2 incl. AU set, complete equipment
Capacity	1 – 6 Teile parts per cycle	1 – 12 parts per cycle
Current consumption	50 W	200 W
Process duration	5 hours (200 µm)	5 hours
Layer thickness	200 or 260 µm	200 or 260 µm
Gold usage	0.3 to 3.5 g Au in the Gramm gold bath ECOLYT	0.4 to 10.0 g AU in the Gramm gold bath ECOLYT
Control	process controlled, process fully automated	process controlled, initialization through chip cards, process fully automated
Recycling	integrated recycling proces	integrated recycling process
Dimensions	(L x D x H) 24 x 24 x 15 cm	(L x D x H) 90 x 31 x 20 cm
Weight	2.0 kg	6.0 kg
		For Gramm electro gold plating: <b>Capacity:</b> depending on the size of the parts, <b>process duration:</b> approx. 1hour



#### Liquids for Gram devices

Gold bath ECOLYT SG 100	15 g gold	7795 3 004	680.00 €*
incl. ACTIVATOR SG 100	1 l		
Gold bath ECOLYT SG 100	7.5 g gold	7795 3 028	360.00 €*
incl. ACTIVATOR SG 100	0.5 l		
Gold bath ECOLYT SG 200	16 g gold	7795 3 104	725.00 €*
incl. ACTIVATOR SG 200	1 l		
Gold bath ECOLYT SG 200	8 g gold	7795 3 128	380.00 €*
incl. ACTIVATOR SG 200	0.5 l		
Cleaner – plaque cleaner and degreaser		7795 3 005	63.00 €
S-Act – gold plating activation		7795 3 006	38.00 €
SG-Flash – pre-gold plating bath		7795 3 007	185.00 €
SP-V – dilution bath for gold plating		7795 3 008	120.00 €

#### Liquids for devices by other manufacturers

BEDRA DENT® gold bath GT 15	8.25 g gold	7796 3 015	**
	0.5 l		

#### Accessories

Glass displacement body GAMMAT® easy		7795 3 039	15.00 €
Measuring cylinder for gold bath		7795 3 024	12.00 €
Magnet agitator	6 x 35 mm	7795 3 025	5.00 €
Magnet agitator	12 x 42 mm	7795 3 032	10.00 €
Retaining clips		7795 3 045	61.50 €
Continuity tester		7795 3 046	38.00 €

#### Consumables

Varnish for gold plating		7795 3 009	28.00 €
Electroforming wax		7795 3 012	21.00 €
Plaster solvent		7795 3 013	22.00 €
Gold bonder	4.8 g	7795 3 014	460.00 €
Copper rods coated		7795 3 015	15.00 €
Conductive lacquer brush		7795 3 016	22.00 €
Placeholder lacquer		7795 3 017	15.00 €
Silver conductive lacquer		7795 3 018	44.00 €
Silver conductive lacquer spray		7795 3 057	62.00 €
Silver conductive lacquer for airbrush		7795 3 404	55.00 €
Solvent for spacer / sealing lacquer		7795 3 021	14.00 €
Solvent for silver conductive lacquer		7795 3 022	14.00 €
Sealing lacquer		7795 3 023	14.00 €
Ecoloy milling set ø 3.00 mm		7795 3 200	98.80 €
Ecoloy milling set ø 2.35 mm		7795 3 400	98.80 €
Polish set		7795 3 201	98.00 €
Dia polish		7795 3 100	90.00 €



\* Additionally gold price. Fluctuations in the gold price can lead to surcharges, which are shown separately on the invoice. | \*\* Current price on request